

We Claim:

1. A vehicle control method for a vehicle having an internal combustion engine coupled to a torque converter, the torque converter having a speed ratio from torque converter output speed to torque converter input speed, the torque converter coupled to a transmission, the method comprising:

selecting a rate of change limit based at least on both a driver request and a speed ratio across said torque converter input and output speeds; and

adjusting an operating parameter to control a change in an engine output to be less than said rate of change limit during preselected operating conditions.

2. The method recited in claim 1 wherein said selected rate of change is further based on a ratio of engine speed to vehicle speed.

3. The method recited in claim 1 wherein said selected rate of change is further based on vehicle speed.

4. The method recited in claim 1 wherein said selected rate of change is further based on vehicle speed and a ratio of engine speed to vehicle speed.

5. The method recited in claim 1 wherein said selected rate of change is based on a first function of said speed ratio and a ratio of engine speed to vehicle speed, and a second function of said driver request and vehicle speed.

5

6. The method recited in claim 1 wherein said driver request is a measured pedal position.

7. The method recited in claim 1 wherein said adjusting  
10 is enabled based on an amount of actuation of an electronically controlled clutch coupled to said torque converter.

8. The method recited in claim 1 wherein said adjusting  
is enabled based on whether a driver is actuating an accelerator  
15 pedal.

9. The method recited in claim 1 wherein said vehicle is a passenger vehicle traveling on a road.

10. A vehicle control method for a vehicle having an internal combustion engine coupled to a torque converter, the torque converter having a speed ratio from torque converter output speed to torque converter input speed, the torque  
5 converter coupled to a transmission, the method comprising:

selecting a rate of change limit based at least on a driver request, a speed ratio across said torque converter input and output speeds, and vehicle speed; and

adjusting an operating parameter to control a change in an  
10 engine output to be less than said rate of change limit during preselected operating conditions.

11. The method recited in claim 10 wherein said selected rate of change is further based on a ratio of engine speed to  
15 vehicle speed.

12. The method recited in claim 10 wherein said selected rate of change is based on a first function of said speed ratio and a ratio of engine speed to vehicle speed, and a second  
20 function of said driver request and vehicle speed.

13. The method recited in claim 10 wherein said driver request is a measured pedal position.

14. The method recited in claim 10 wherein said driver request is a requested output torque.

15. The method recited in claim 10 wherein said adjusting  
5 is enabled based on an amount of actuation of an electronically controlled clutch coupled to said torque converter.

16. The method recited in claim 10 wherein said adjusting  
is enabled based on whether a driver is actuating an accelerator  
10 pedal.

17. The method recited in claim 10 wherein said vehicle is a passenger vehicle traveling on a road.

18. An article of manufacture comprising:

a computer storage medium having a computer program encoded therein for controlling a vehicle having an internal combustion engine coupled to a torque converter, the torque converter

5 having an input speed and an output speed, the torque converter coupled to a transmission, said computer storage medium comprising:

code for selecting a rate of change limit based at least on a driver request, a speed ratio across said torque converter  
10 input and output speeds, a ratio of engine speed and vehicle speed, and vehicle speed; and

code for adjusting an operating parameter to control a change in an engine output to be less than said rate of change limit during preselected operating conditions.

15